



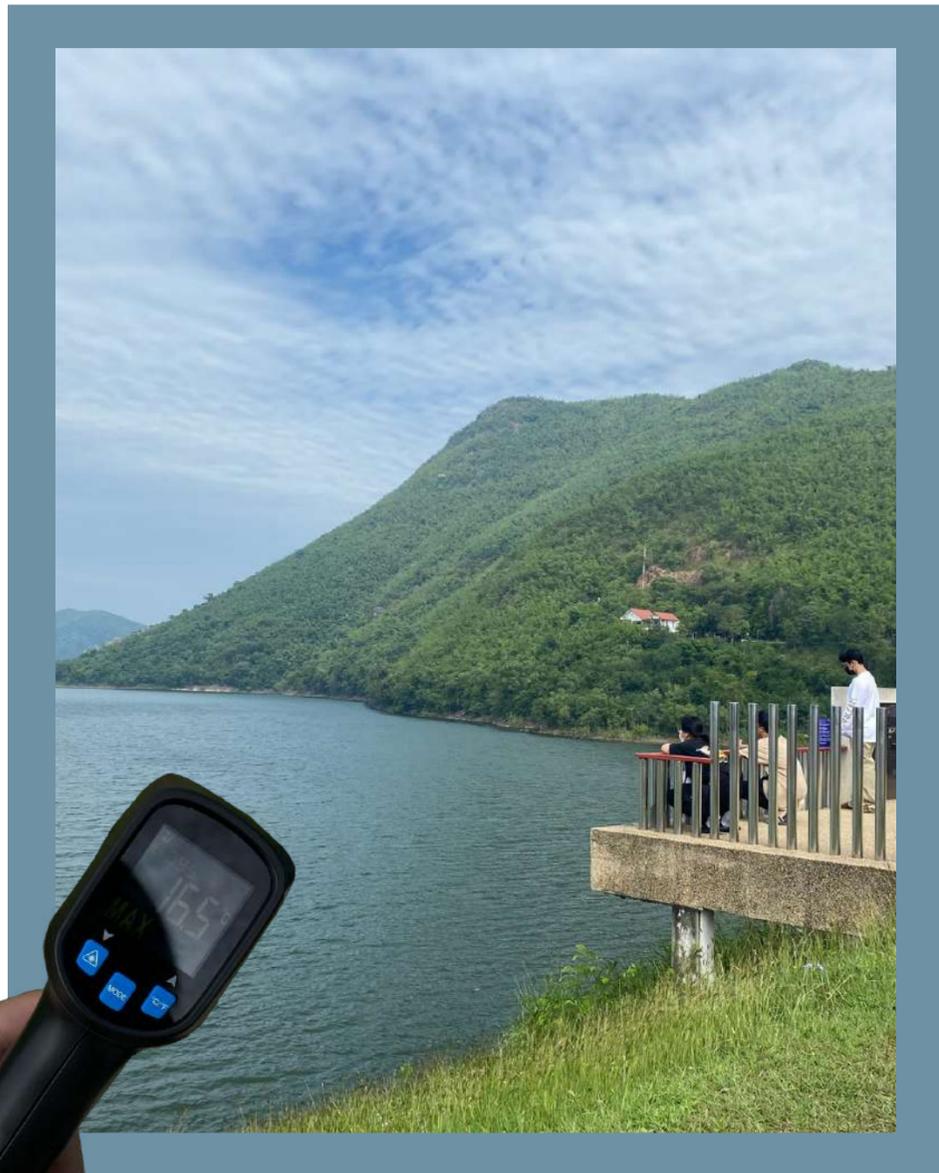
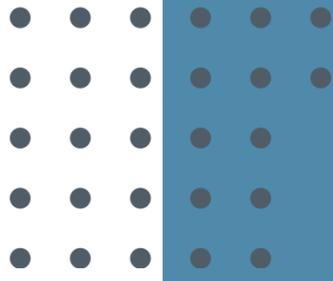
Understanding the Interplay of Land Surface Temperature, Soil Moisture, and Air Temperature in Diverse Ecosystems



Chonprathanwittaya School



INTRODUCTION



- Nowadays, due to the global warming crisis, the rain is not like it was 10 or 20 years ago. In the past, it rained for three or four days. but rain will only fall in the city for a period of 30 to 40 minutes this fall. Dams, forests and land do not receive enough water. Therefore it is dry. May not be able to do agriculture So I set out to do research. Find those areas by observe 4 dams and nearby places around To forward the government to deal with this problem through proper management of the national budget



OBJECTIVE AND HYPOTHESIS

Objective

- Compare between the study points of satellite data from 2001-2023 to see how the land cover has changed and how much it affects temperature and soil humidity.
- Will the air temperature and humidity in the Kaeng Krachan Dam area from satellite measurements match with the air temperature and humidity in the Kaeng Krachan Dam area that we measured at that time?



OBJECTIVE AND HYPOTHESIS



Hypothesis

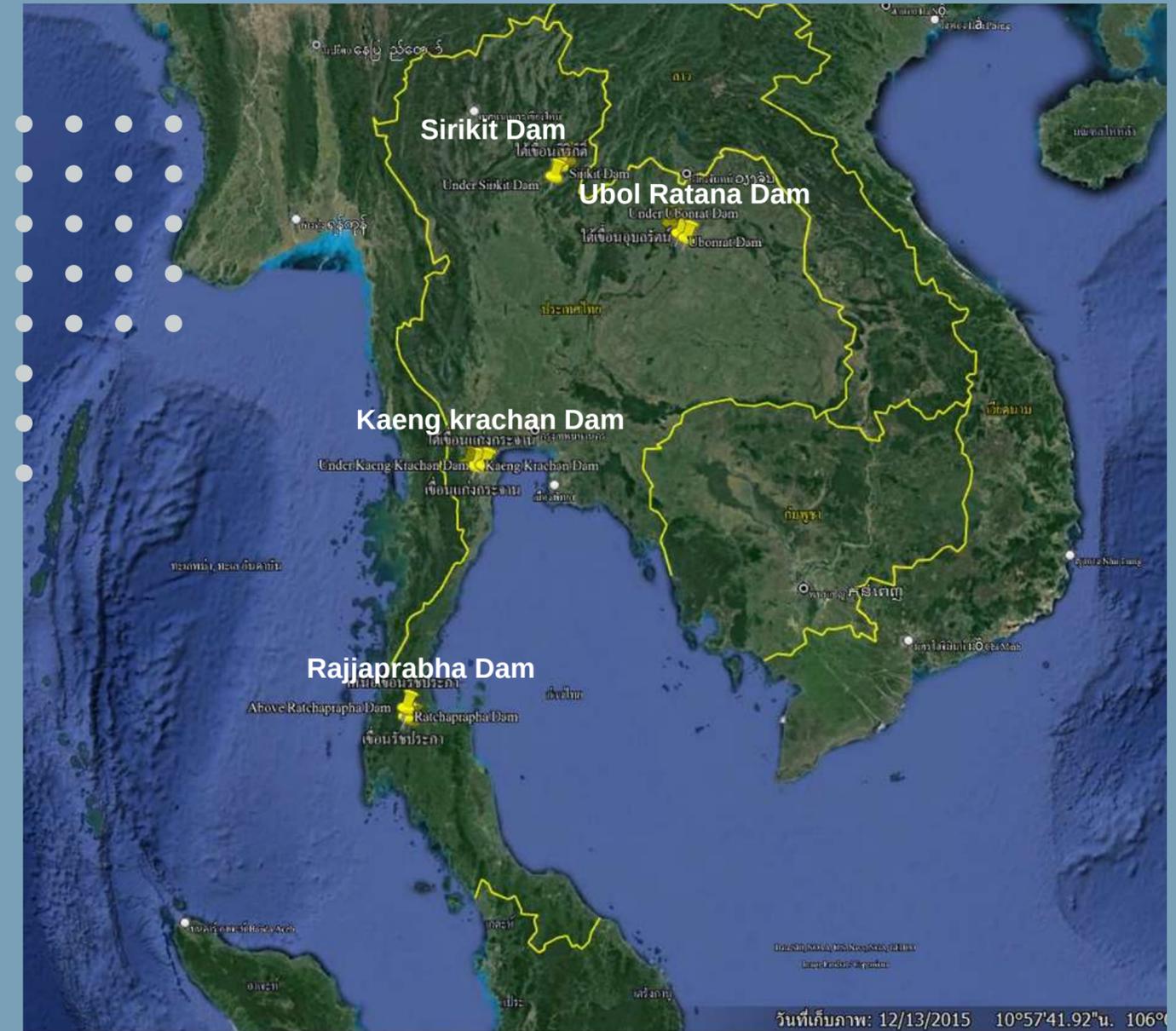
- Location has no effect on temperature. (Phetchaburi, Uttaradit, Khon Kaen, Surat Thani)
- Soil moisture has no influence on temperature.(forest above dam, dam, city)
- Land cover does not affect soil humidity. (forest above dam, dam, city)
- The province where the dam is located has no influence on soil moisture (Phetchaburi, Uttaradit, Khon Kaen, Surat Thani).
- Location and land are not related.



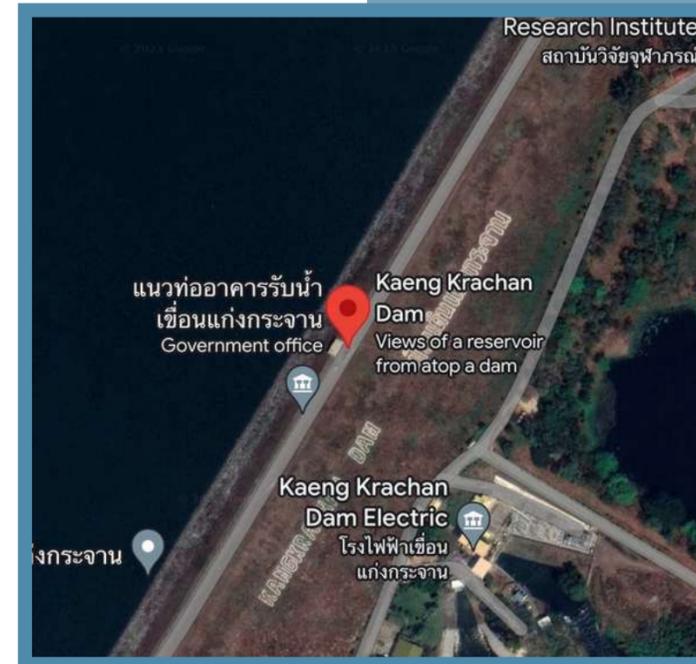
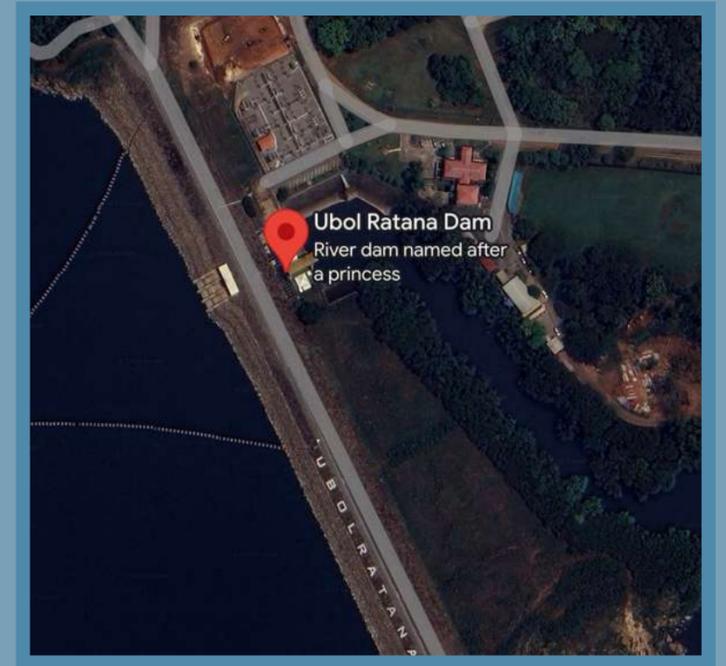
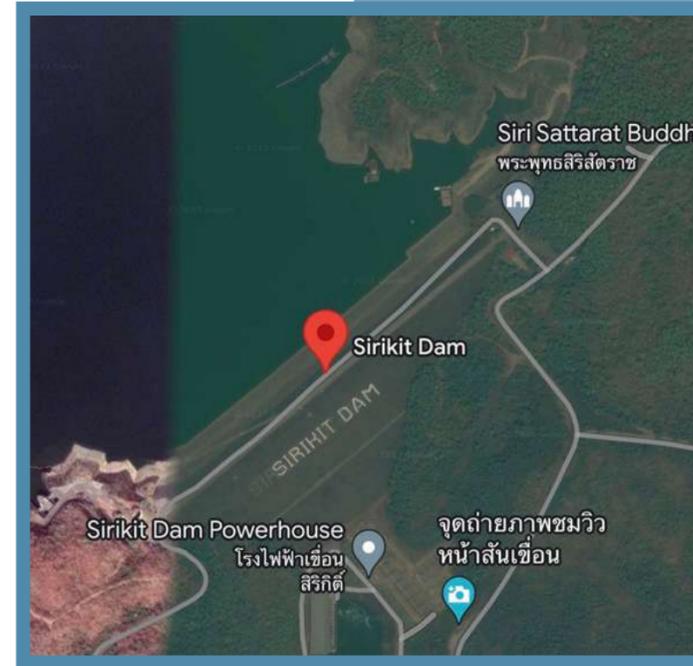
MATERIALS AND METHODS

Kaeng Krachan

Study area around Kaeng Krachan Dam
Study the temperature and humidity in
Kaeng Krachan Dam. and compare with 3
other dams.

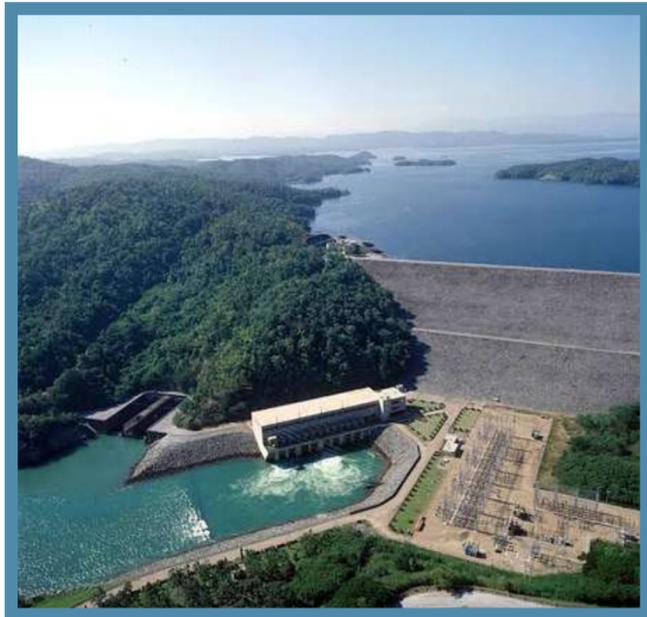


MATERIALS AND METHODS

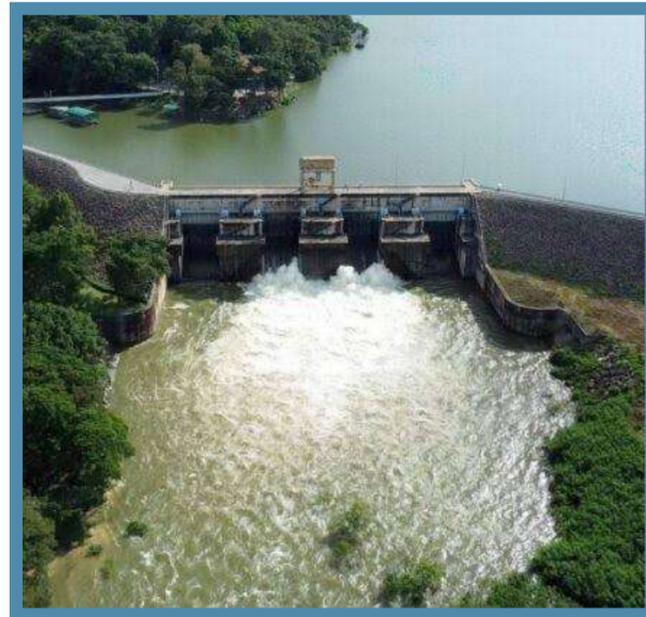




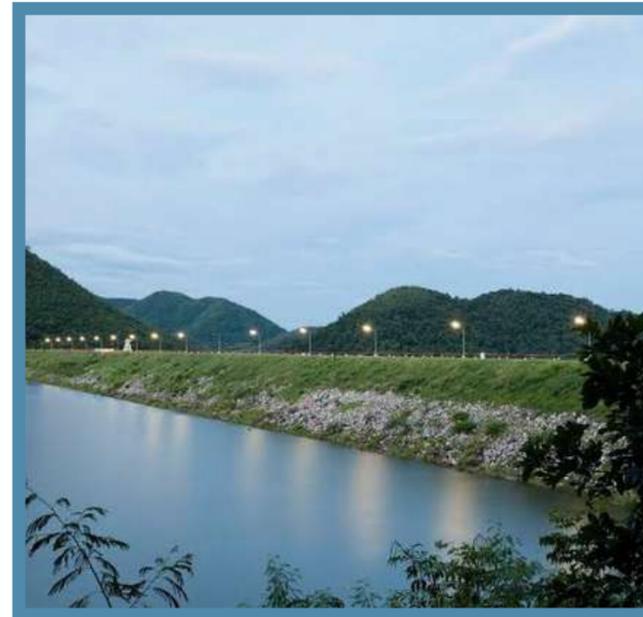
MATERIALS AND METHODS



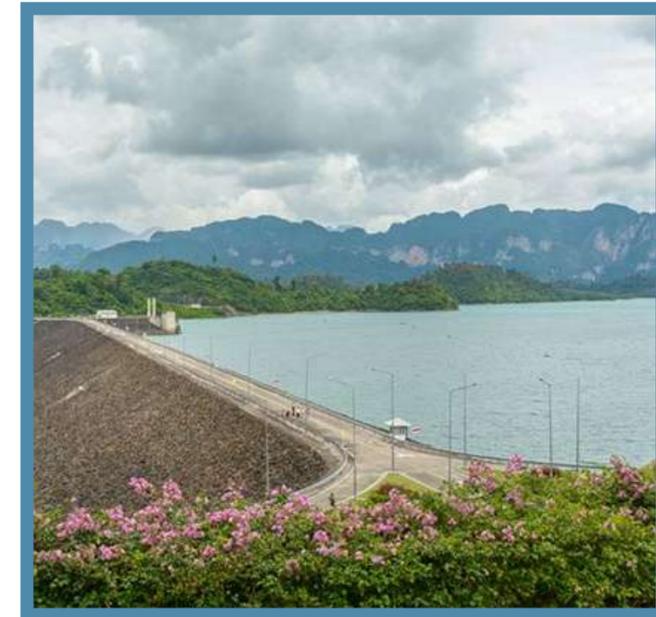
Sirikit Dam



**Ubol Ratana
Dam**



**Kaeng Krachan
Dam**



Rajjaprabha Dam

MATERIALS AND METHODS

Satellite imagery



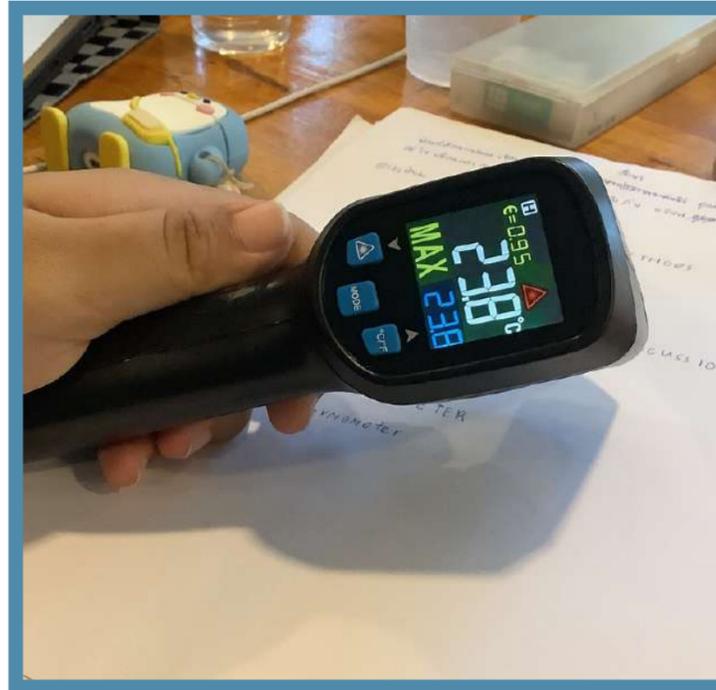
terra



smap

MATERIALS AND METHODS

Equipment



- INFRARED THERMOMETER



- XIAOMI THERMOMETER

MATERIALS AND METHODS



- Use an infrared thermometer to measure temperature. Both cement floor and ground.

METHODS (INFRARED THERMOMETER)



- Measured by giving people 1, 2, and 3 Stand about 2 steps apart. Repeat 3 times, the same on both cement floor and ground.

MATERIALS AND METHODS

METHODS (INFRARED THERMOMETER)



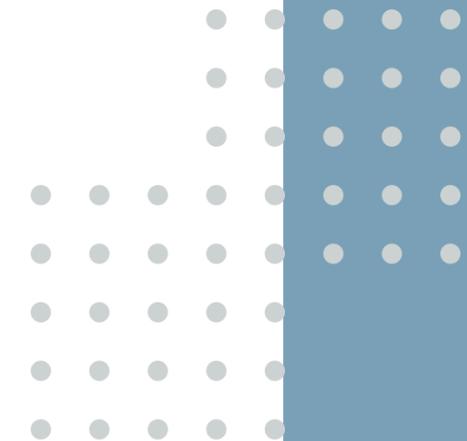
- Then wait another 10 minutes. Then measure again. Do it all 4 times Do it at the same time in both areas, namely the dam ridge area. Kaeng Krachan Dam and Rueanwaree Resort.

MATERIALS AND METHODS

METHODS (INFRARED THERMOMETER)



- Record the results.



MATERIALS AND METHODS

METHODS (XIAOMI THERMOMETER)



- Install the xiaomi thermometer in the area of Kaeng Krachan Dam and ruanwaree resort.

MATERIALS AND METHODS

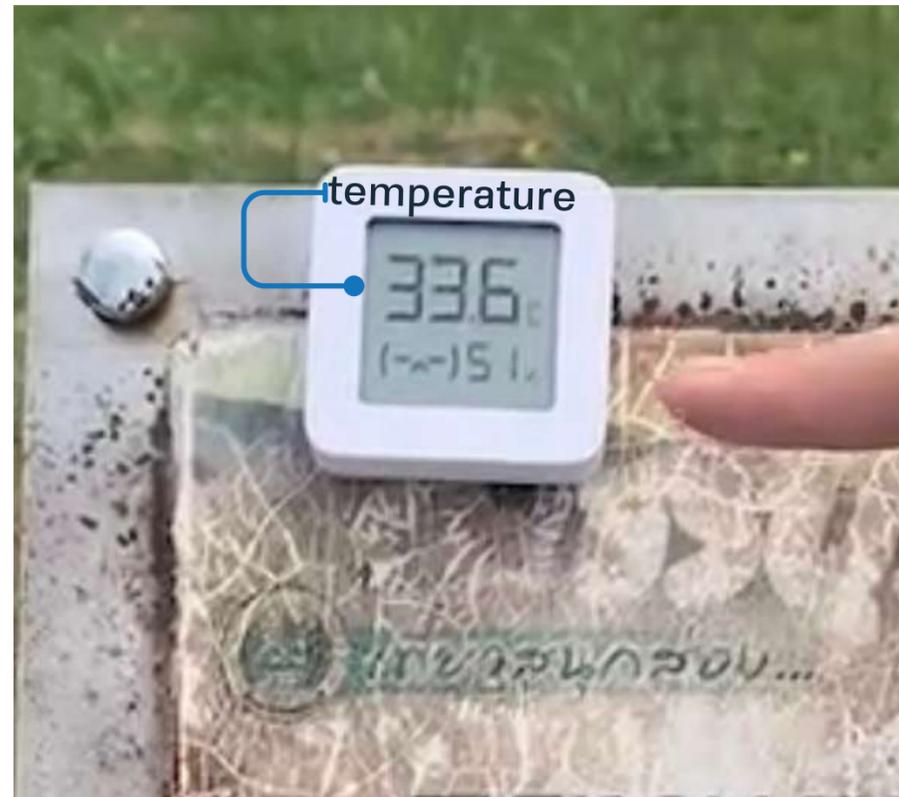
METHODS (XIAOMI THERMOMETER)



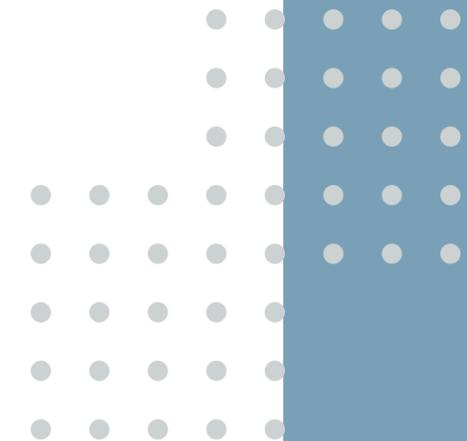
- Wait 10 minutes , When the time is up, come and see , Do all 4 distance.

MATERIALS AND METHODS

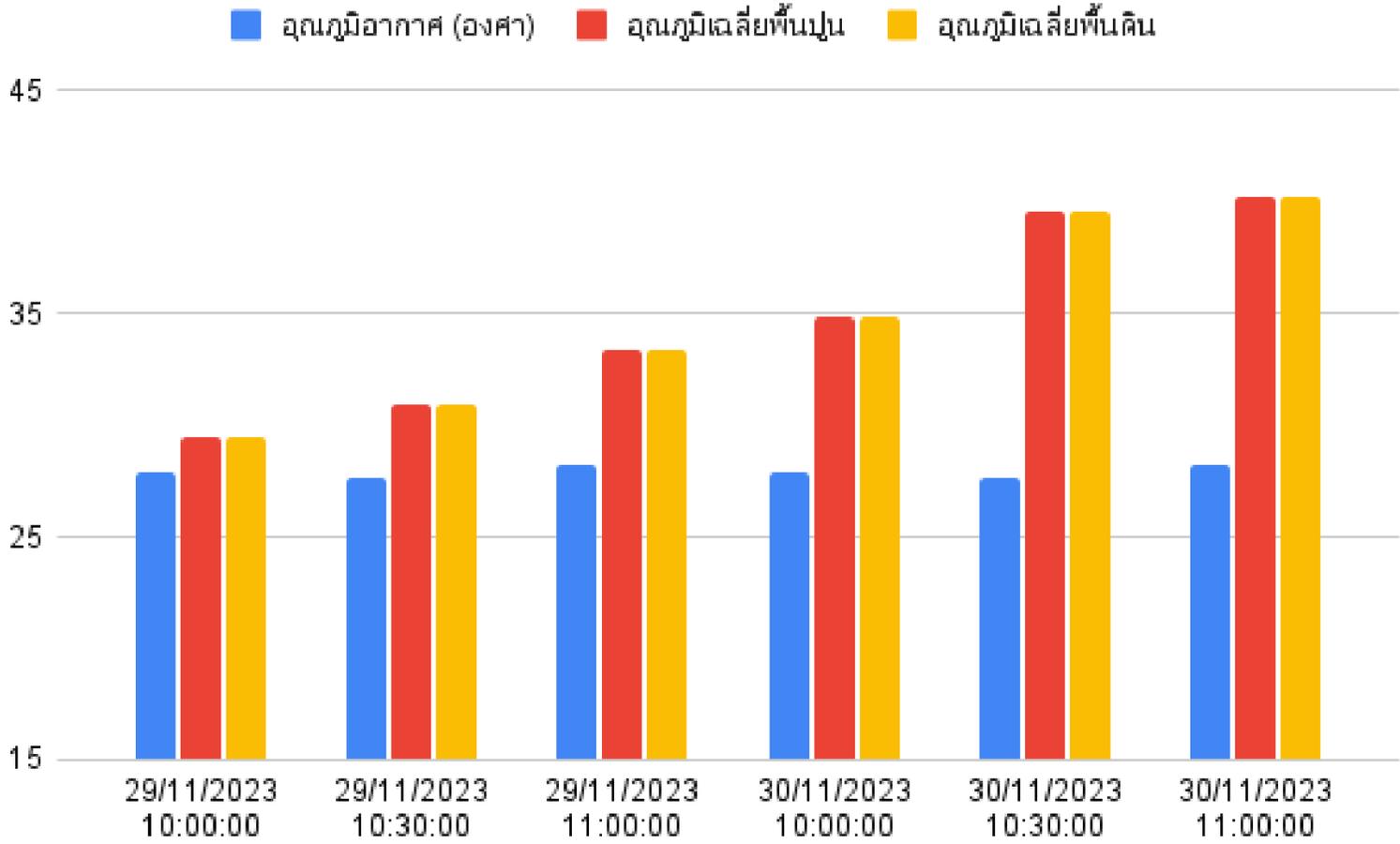
METHODS (XIAOMI THERMOMETER)



- Record results and summarize (got both temperature and humidity)

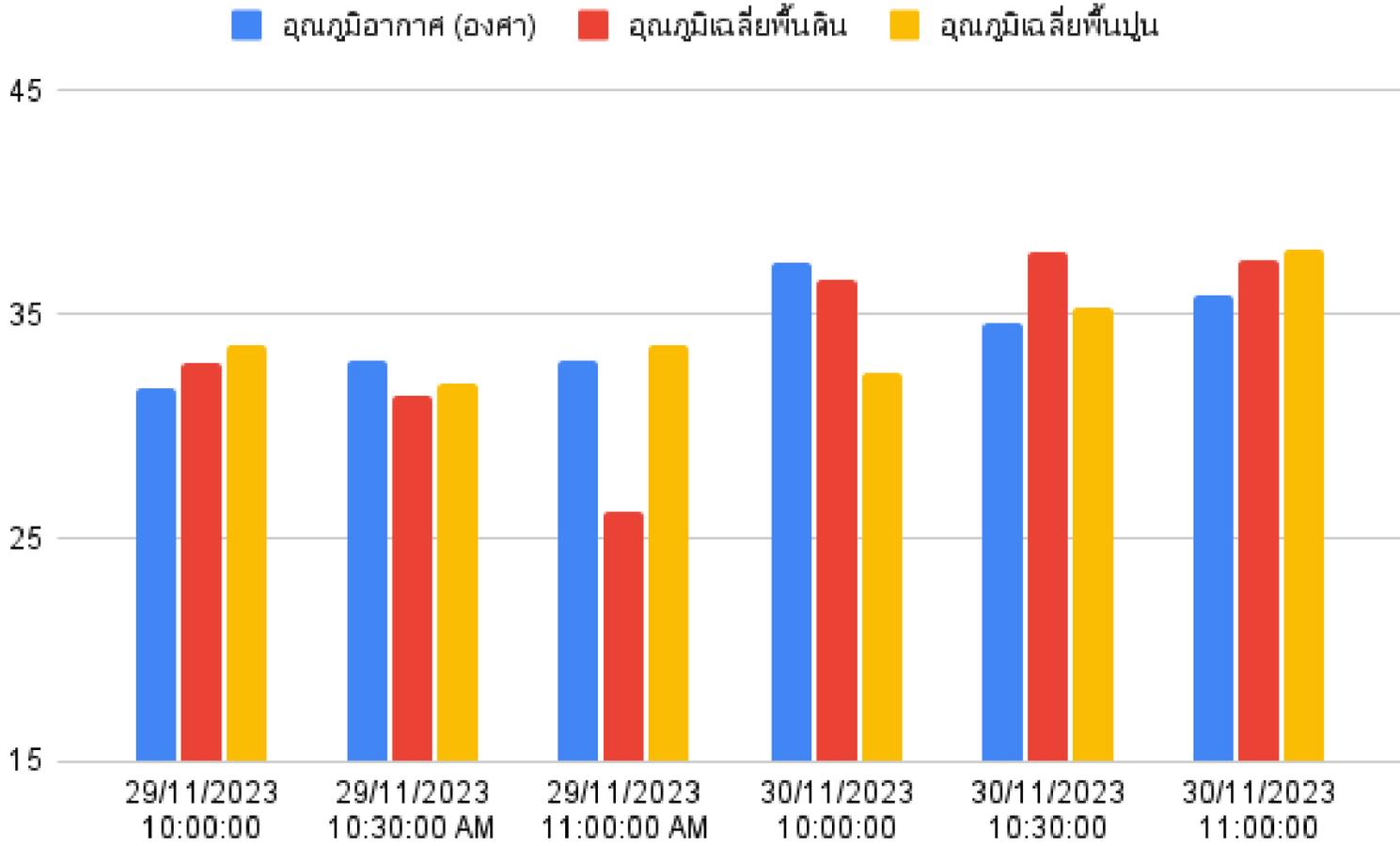


RESULTS AND DISCUSSION



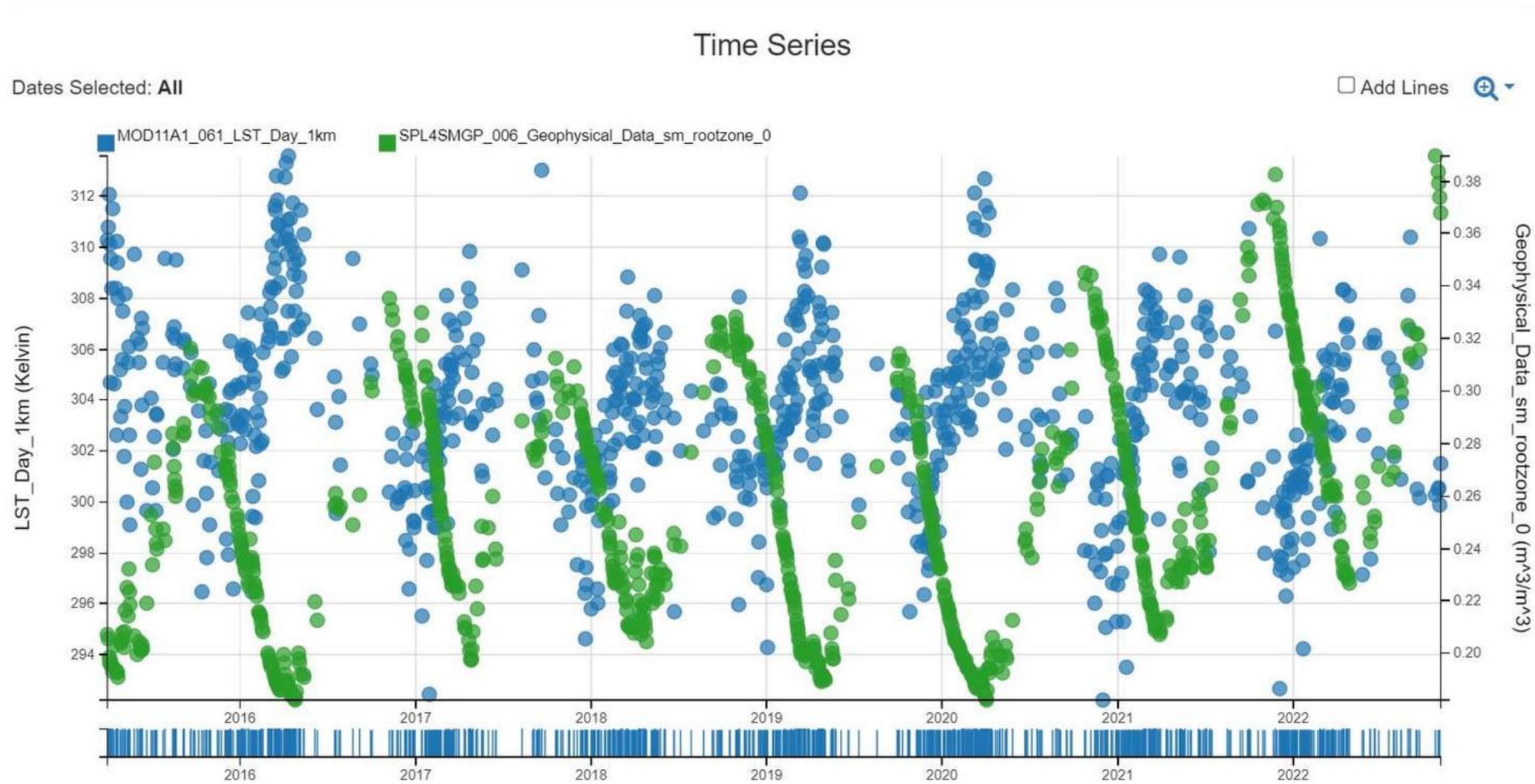
Graph showing the temperature of the ground / cement floor around the Kaeng Krachan Dam ridge.

RESULTS AND DISCUSSION

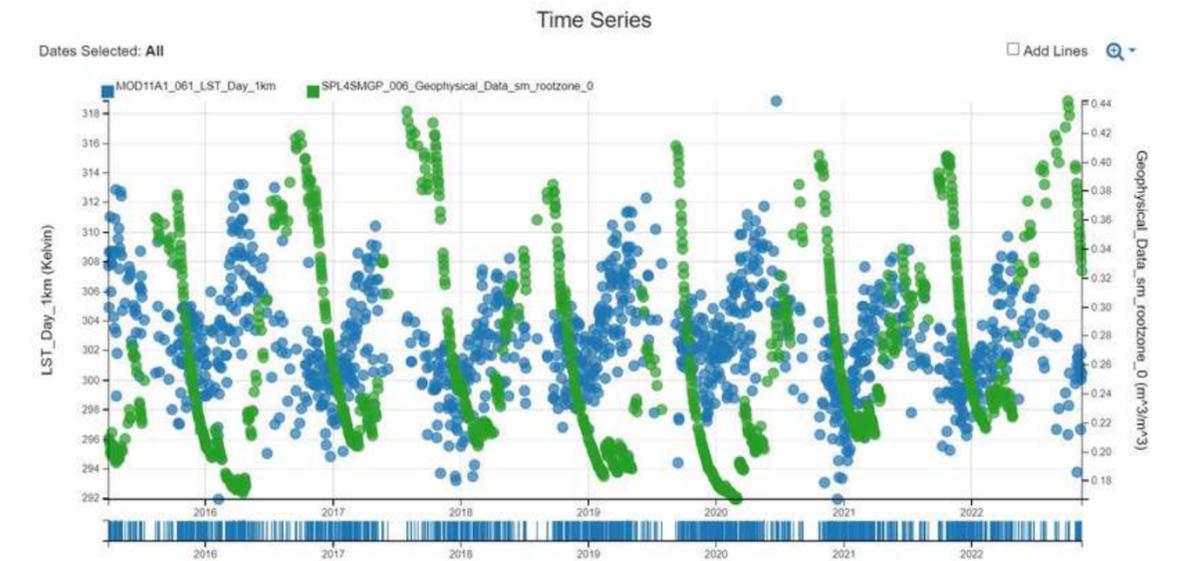
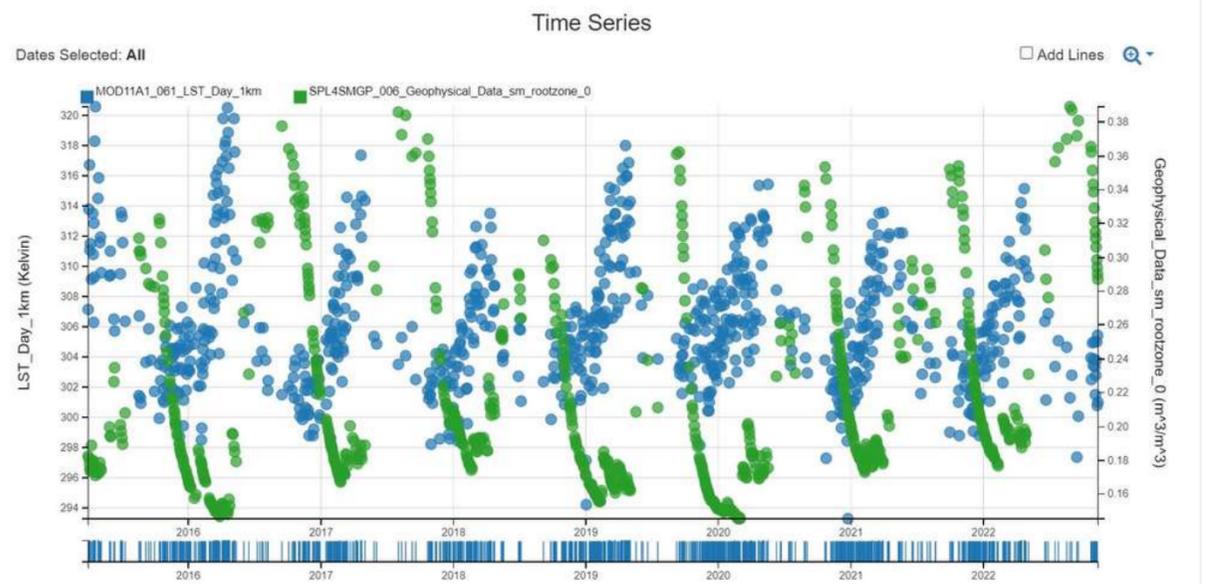
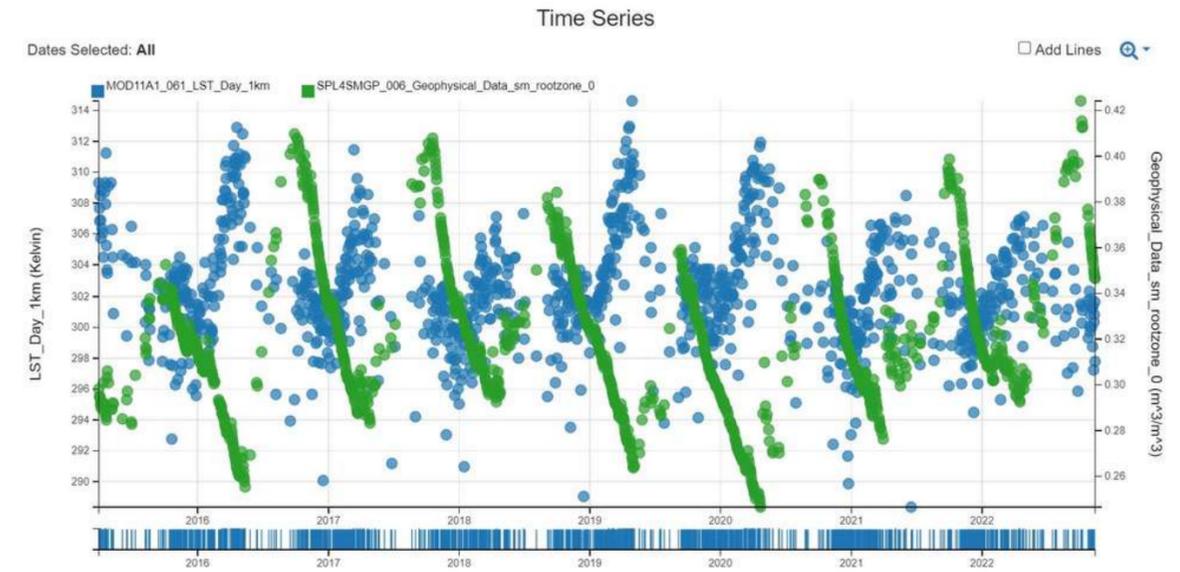
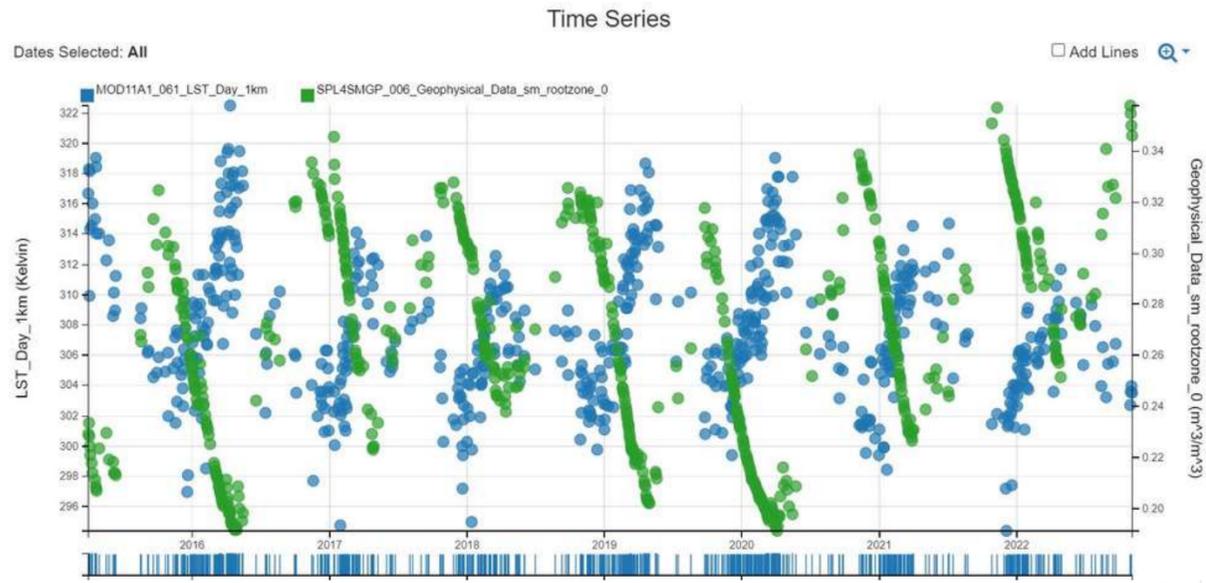


Graph showing ground/cement temperature around the Ruanwaree Resort.

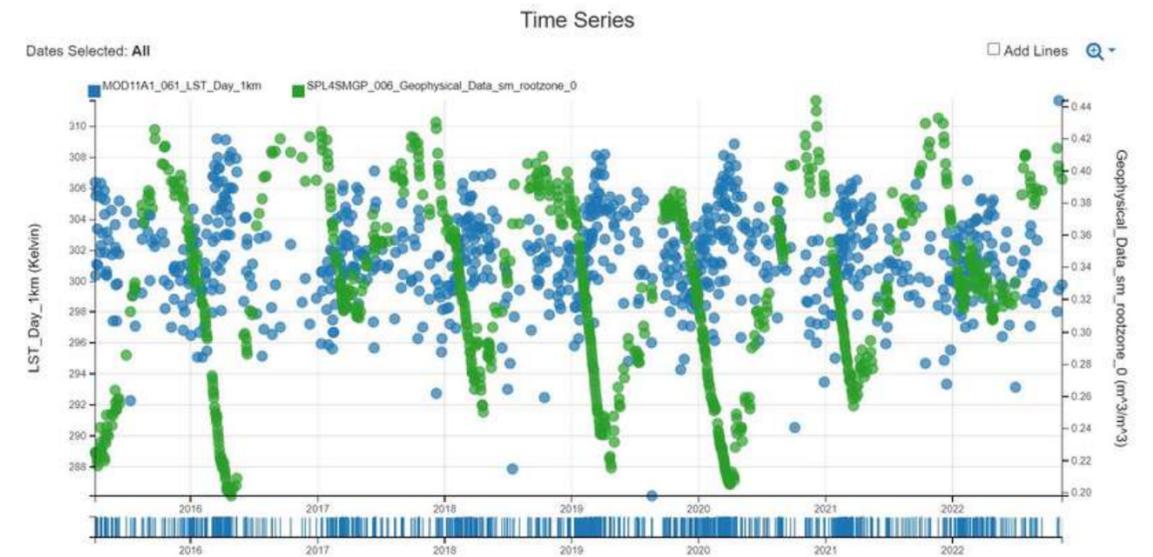
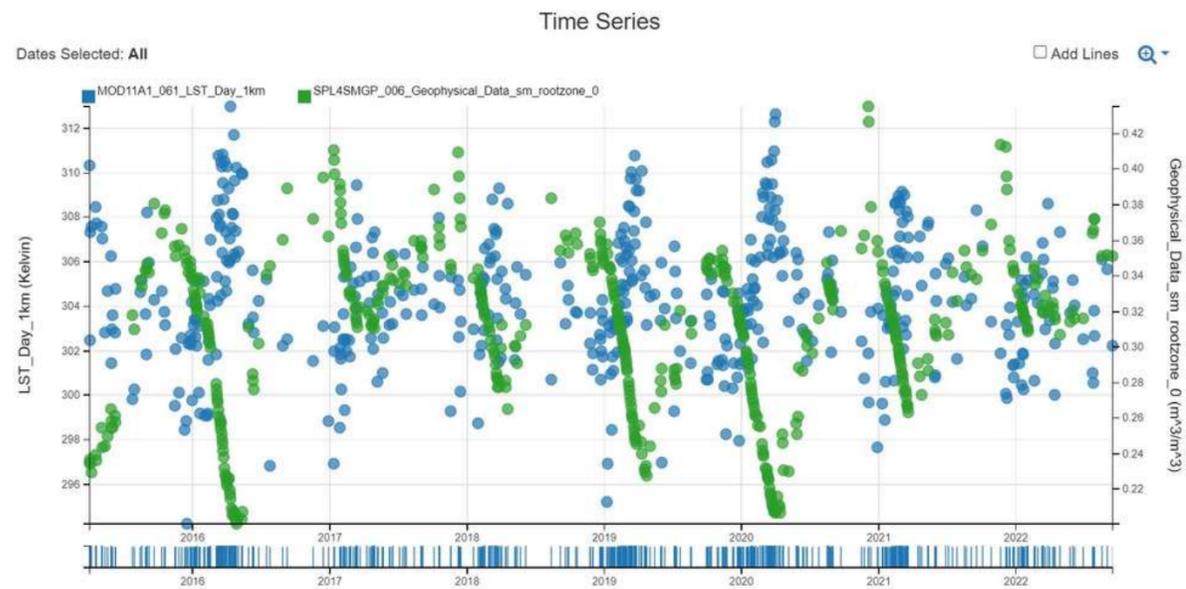
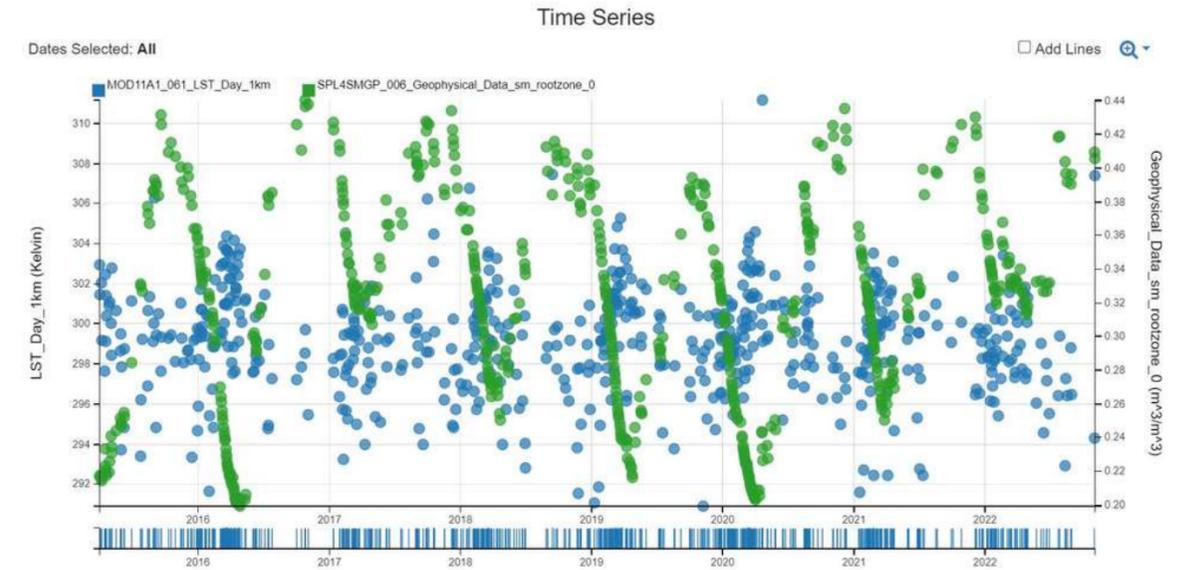
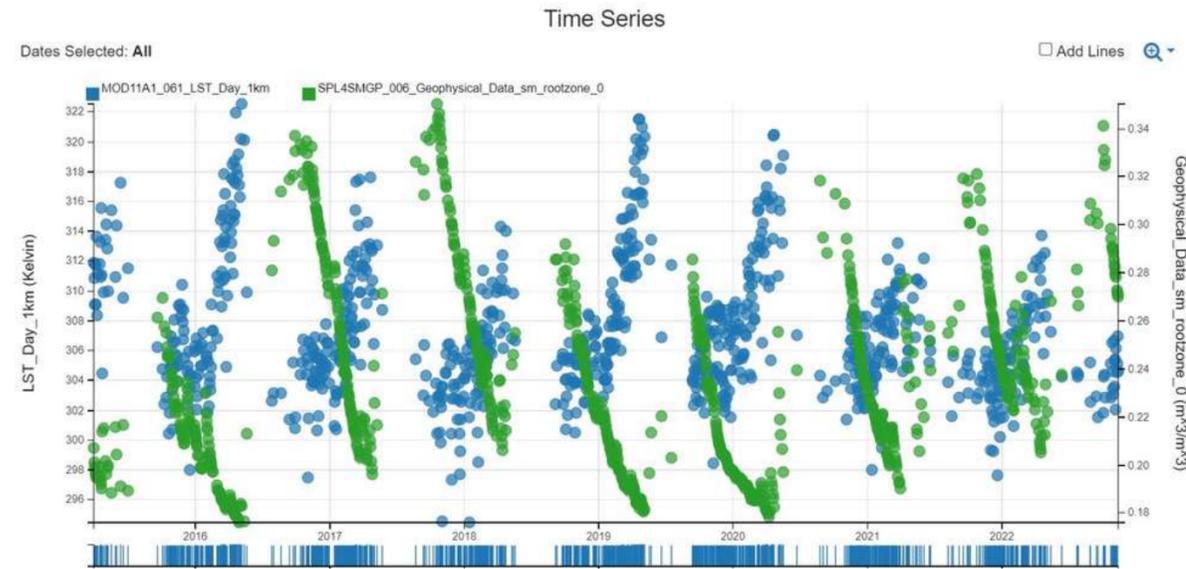
RESULTS AND DISCUSSION



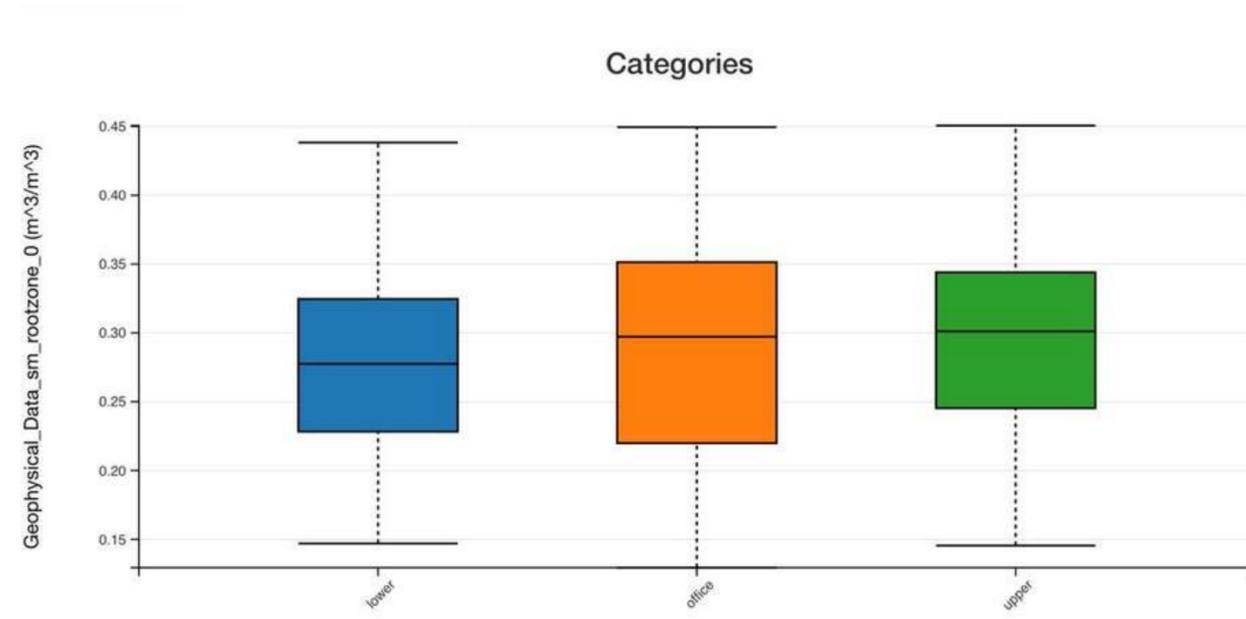
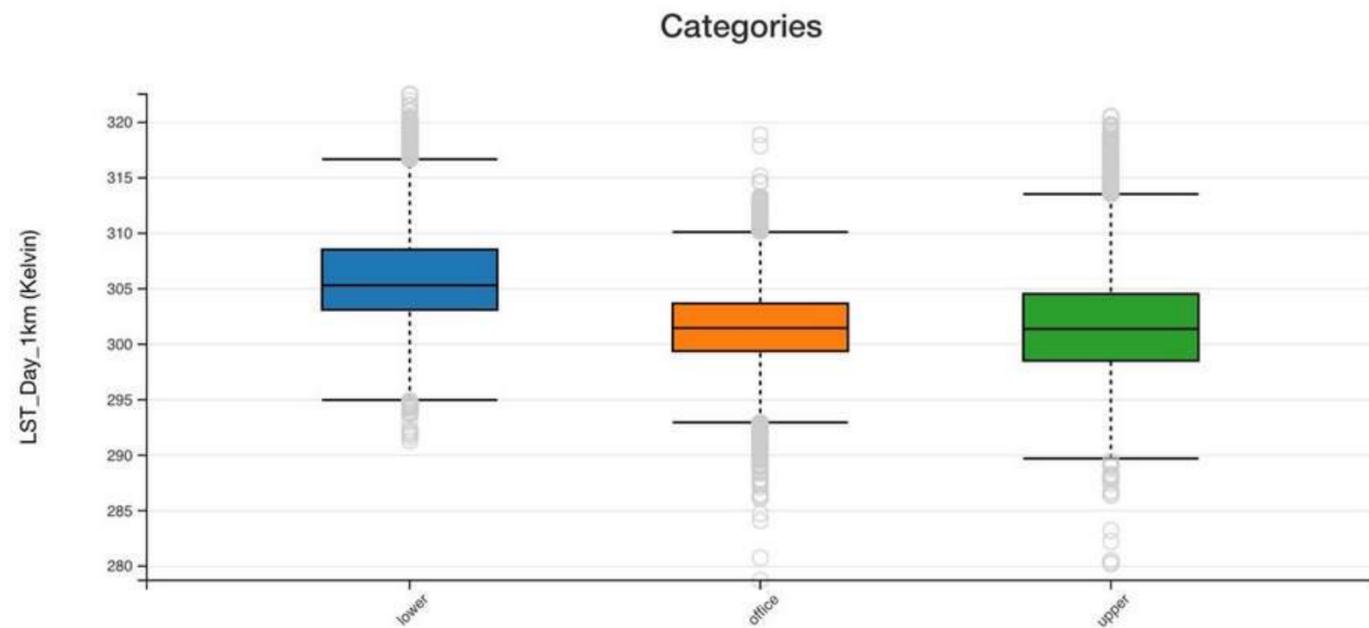
RESULTS AND DISCUSSION



RESULTS AND DISCUSSION

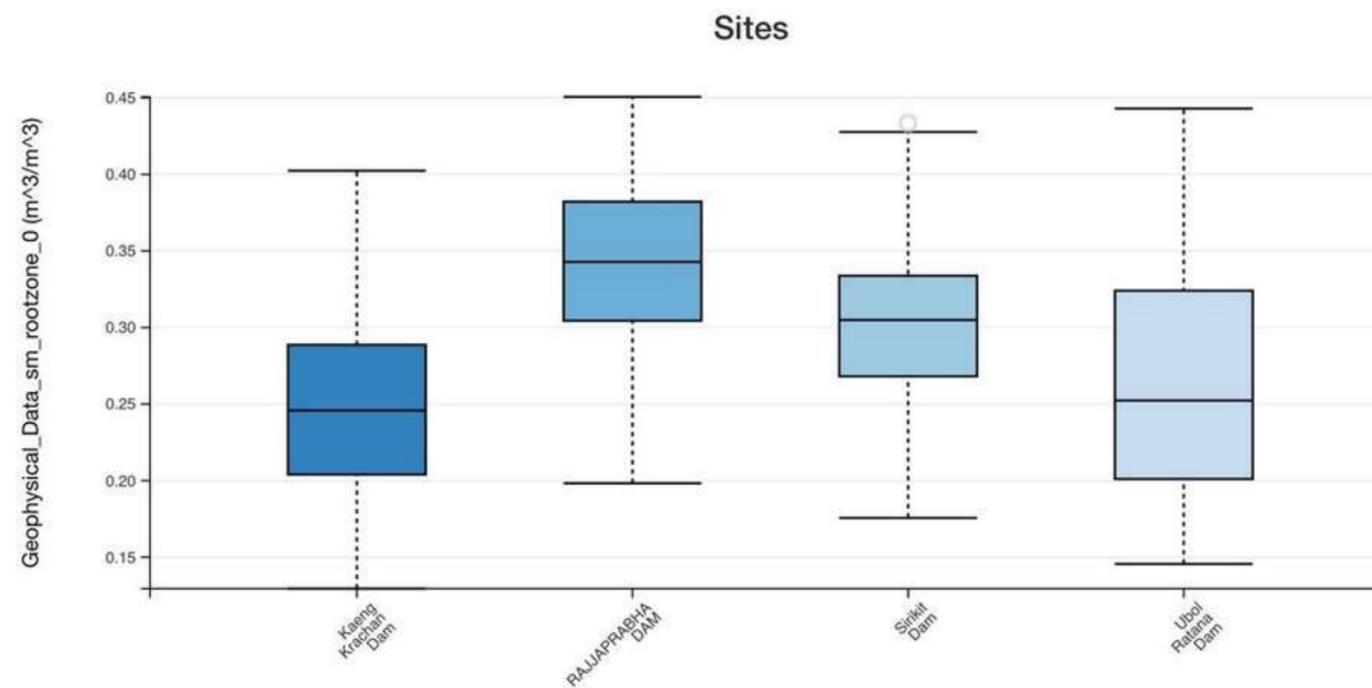
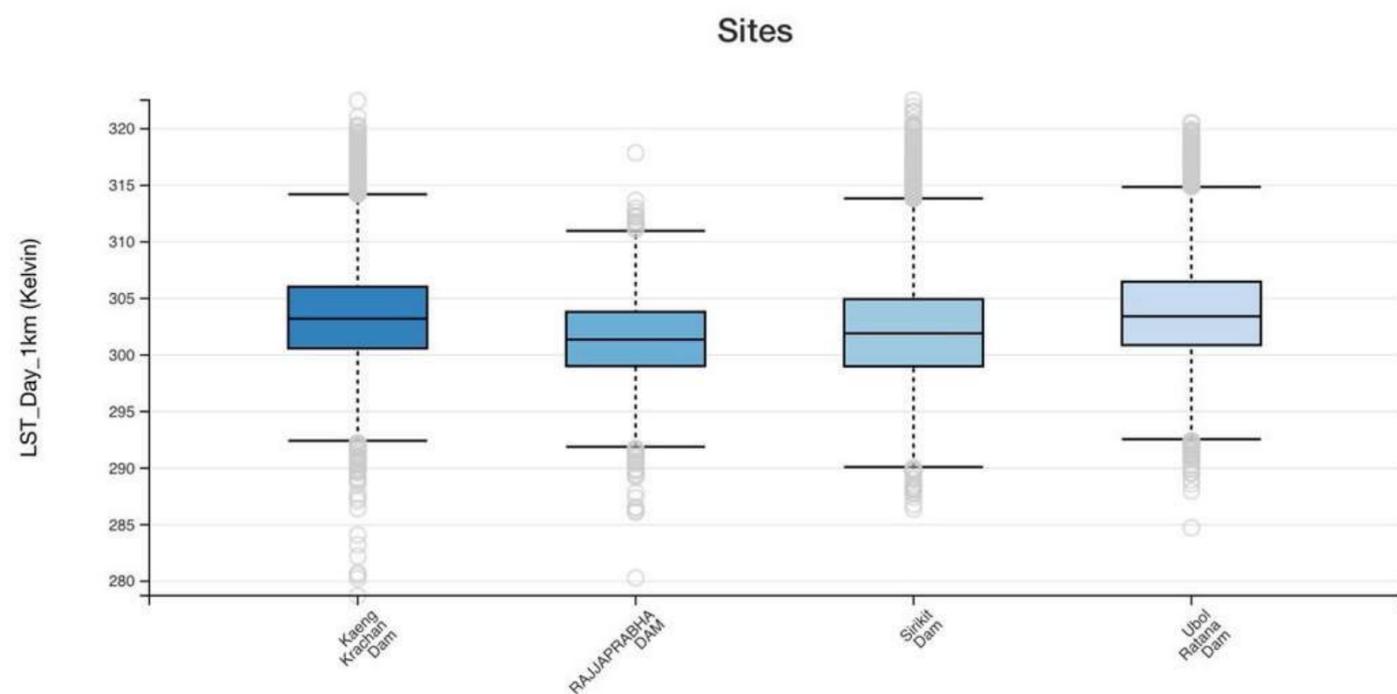


RESULTS AND DISCUSSION





RESULTS AND DISCUSSION





Organizer



Mathawin
Waew-ngam



Phonnaphat Khamai



Wachirawit
Lor-prasert



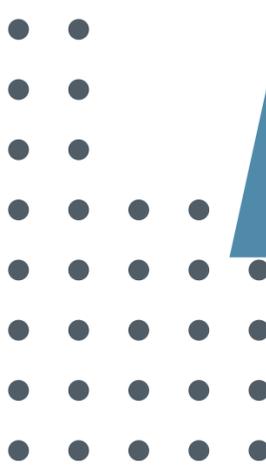
Chonlathit
Phumcharoen



Peerapat
Eiamkleab

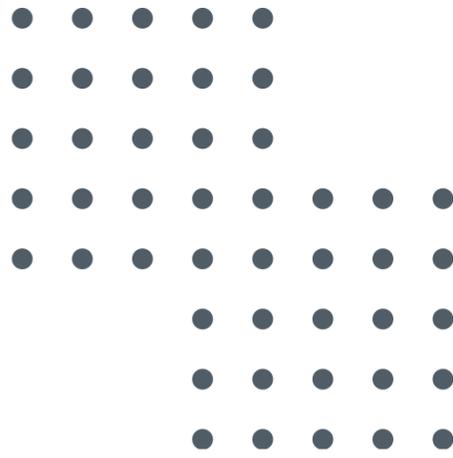


Peeradech
Jantanudech





Organizer



Phopha
Rattanamanee



Puttipong
Munjitt



Waratchaya
Thongtanom



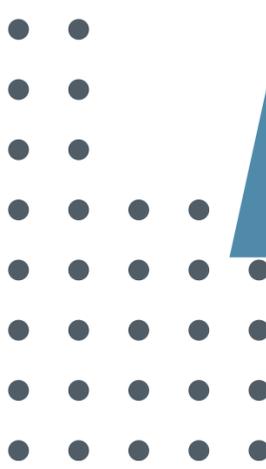
Vijja
Soontornwong



Chanya
Pornpipith

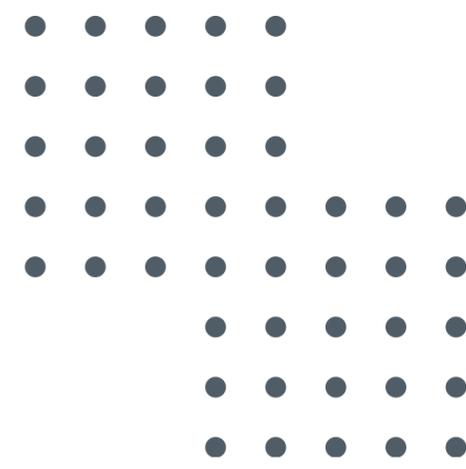


Chitapa
Chanthokun





Organizer



Pornchanok
Chaiwut



Pitcharporn
Chalermphun



Chanyanut
Noomrit



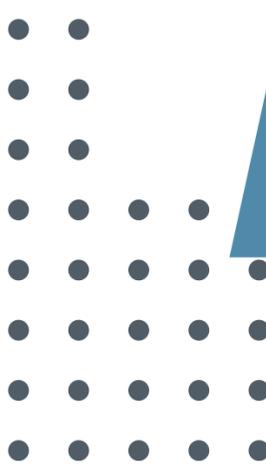
Nipitpon
panpitpat

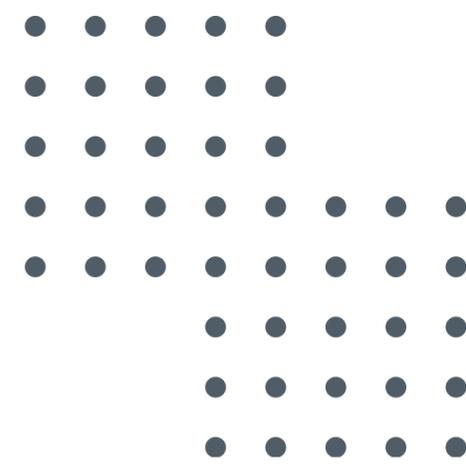


Varunya
Rueangchai



Pimpitchaya
Ruamboon





Thank you

